ABSTRACT

A dynamic random access memory (DRAM) is formed on a semiconductor wafer, the semiconductor wafer including a substrate, a thin film layer positioned on the substrate, and a photoresist layer positioned on the thin film layer. Two exposure processes are employed. The first exposure process forms first exposure regions that are linear and parallel with each other on the photoresist layer. The second exposure process forms second exposure regions that are interlaced with and perpendicular to each other on the photoresist layer. Performing a development process to the wafer removes the first exposure regions and the second exposure regions of the photoresist layer to form an array photoresist layer on the thin film layer. The array photoresist layer functions as a mask to perform an etching process to the thin film layer for forming an array thin film layer, the array thin film layer acting as a storage nodes in the DRAM.